

REMARKS / ARGUMENTS

Examiner Do is thanked for the thorough examination of the subject Patent Application. The claims have been carefully reviewed and amended, and are considered to be in condition for allowance.

It is the objective of this invention to provide a multichannel digital filter bank circuit and a method implemented by cascading sub-filters of the recursive type suitable for graphically equalizing electrical signals received via a communication path. It is also an objective of this invention to produced equalized signals having minimal distortion of signal spectral characteristics including magnitude and phase. The circuit of this invention is implemented with cascaded connections of first order or second order digital filters. It is an additional objective of this invention to provide for the programming of the individual transfer functions of the above digital filters so as to produce unity gain. This unity gain case results in an output signal which is an exact replica of the input signal with no delay. This result indicates the minimal distortion introduced by the method of this invention.

Reconsideration of the rejection of claims 1-2 and 4-5, under 35 U.S.C. 103(a) as being unpatentable over Dyer (US Patent 4,947,360) in view of King et al. (US Patent 7,123,728) is requested based on the following.

As the examiner states in the October 2, 2007 office action, "Dyer fails to disclose in Figures 1-3 a filter which is suitable for graphically equalizing electrical signals received via a communication path, and first and second order digital filters have programmable parameters which allow users to shape graphics equalizer's frequency spectra as desired." However, the examiner incorrectly states that King et al. discloses the graphics equalizer utilizing the filter. In King column 1, lines 63-67, the invention is summarized as "a computer readable medium containing program instructions for controlling a parametric equalizer..." Similarly, in King column 4, lines 43-46, it is stated, "to facilitate discussion, Figure 4 is a screen shot of a graphics user interface (GUI) that is provided by a preferred embodiment of the invention". This "graphic user interface" terminology should not be confused with the "graphic equalizer" terminology. King et al. is a computer readable program for controlling a parametric equalizer. Since King et al. is based on a parametric equalizer, one skilled in the art would not have a reason to combine King et al. with Dyer to suggest or make obvious the instant application. Therefore, independent claims 1 and 4 should be allowed.

Also, dependent claims 2 and 5 which depend on independent claims 1 and 4 should be allowed. In addition, independent claim 4 has been amended to include the word "graphically" before the word "equalizing" as shown in the amended claim below. This amendment to independent method claim 4 makes its wording consistent with independent claim 1.

A method for graphically equalizing electrical signals, utilizing multichannel digital filter bank, comprising the steps of:

filtering the electrical signals using first order or second order digital filtering, wherein said filters are cascade connected, whereby said electrical signals are enhanced, attenuated, or kept the same, after said step of filtering the electrical signals using first order or second order digital filtering, wherein said filters are cascade connected, wherein said first order or second order digital filtering are of the recursive type suitable for graphically equalizing electrical signals received via a communication path, wherein said first or second order digital filtering do not require multiple sampling frequencies, and wherein said first or second order digital filters have programmable parameters which allow users to shape said graphics equalizer's frequency spectra as desired.

Dependent claims 3 and 6 are rejected under 35 USC 103(a) as being unpatentable over Dyer (US 4,947,360) in view of King et al. (US 7,123,728) as applied to claims 1 and 4 respectively, in further view of Cox et al. (US 5,353,346). Dependent claims 3 and 6 depend on independent claims 1 and 4 respectively, which should now be allowed. Therefore, dependent claims 3 and 6 should now be allowed.

The examiner is thanked for the thorough review of this patent application. The changes to the specification do not introduce any new matter.

It is requested that should there be any problems with this Amendment, please call the undersigned Attorney at (845) 452-5863.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'SBA', with a long horizontal flourish extending to the right.

Stephen B. Ackerman, Reg. No. 37,761